

# **Objectives for Personal Living and Finances**

**Developed as directed by the *Code of Virginia*  
§22.1-253.13:1.B  
and  
correlated with the  
Mathematics Standards of Learning  
for Virginia Public Schools**

**Prepared by the  
Virginia Department of Education  
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# Introduction

## The Purpose

In accordance with a mandate from the General Assembly of Virginia, this document presents to Virginia teachers a list of personal living and finances objectives to be incorporated in middle and high school mathematics classes for the purpose of teaching students “the skills to manage personal finances and to make sound financial decisions.” To further assist the classroom teacher, this document correlates the personal living and finances objectives with the Virginia Mathematics Standards of Learning and with the Virginia career and technical education course competencies.

## The Background

On April 22, 1998, the General Assembly of Virginia approved SB527, a bill that directed the Virginia Board of Education to “develop and approve objectives for mathematics, at the middle and high school levels, for personal living and finances, which shall focus on money management skills for individuals and families.”

The *Code of Virginia* §22.1-253.13:1.B specifies:

- By July 1, 1999, the Board shall develop and approve objectives for mathematics, at the middle and high school levels, for personal living and finances
- the personal living and finances objectives shall require instruction in those skills necessary to handle personal business and finances and shall include, but need not be limited to
  - opening a bank account and how to judge the quality of a bank’s service
  - balancing a check book
  - completing a loan application
  - the implications of an inheritance
  - the basics of personal insurance policies
  - consumer rights and responsibilities
  - dealing with salesmen and merchants
  - debt management, including retail and credit card debt
  - state and federal tax computation
  - local tax assessments
  - computation of interest rates by various mechanisms
  - understanding simple contracts
  - how to contest an incorrect bill.
- the objectives shall not be required to be included in the Board’s Standards of Learning
- the objectives shall be developed in a manner to ensure that instruction in the Standards of Learning shall not be de-emphasized

- the Board shall not be required to evaluate student achievement concerning such objectives in the Standards of Learning Assessment Tests required by §22.1-253.13:3 of the *Code of Virginia*

The full text from the *Code of Virginia* §22.1-253.13:1.B relating to the development of personal living and finances objectives is provided in Appendix A.

### **The Response**

In response to this directive, the Virginia Department of Education developed a process for compliance. The Department called together a statewide panel of Virginia mathematics teachers to examine the list of objectives in light of the educational needs of Virginia students and in light of existing Virginia Mathematics Standards of Learning.

### **The Results**

The results of this panel's work are a list of personal living and finances objectives validated for Virginia students and a correlation of these objectives with the Virginia Mathematics Standards of Learning. The results are presented in this document.

This document also includes correlations of the personal living and finances objectives with existing Virginia career and technical education courses that currently include the related content. One chart presents the correlation for grades 6-9 and the other, for grades 10-12. The information in these charts is intended to assist mathematics teachers and career and technical education teachers who wish to work together in helping their students fulfill the personal living and finances objectives. The charts also are intended to identify existing courses that support and reinforce the attainment of the financial and personal living objectives.

## **Objectives for Personal Living and Finances**

The chart on page six represents the Objectives for Personal Living and Finances that were validated by a panel of Virginia mathematics teachers on October 22, 1998. The Objectives are based on topics specifically cited in §22.1-253.13:1.B of the *Code of Virginia*. The mathematics teacher panel included additional objectives after examining personal living and finances materials from local, state, and national sources. A list of these resources appears in Appendix B.

# **Objectives for Personal Living and Finances**

**Validated by Panel of Virginia Mathematics Teachers  
October 22, 1998**

**Approved by the Virginia Board of Education  
April 28, 1999**

These Objectives are based on topics specifically cited in §22.1-253.13:1.B of the *Code of Virginia*.

## **Compute and Understand Taxes**

- Investigate the implications of an inheritance.
- Compute State and Federal taxes.
- Verify local tax assessments.

## **Prepare and Balance a Personal/Family Budget**

- Judge the quality of a bank's services to open a bank account.
- Balance a check book.
- Investigate the basics of personal insurance policies.
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## **Manage Debt, including Retail and Credit Card Debt**

- Complete a loan application.
- Compute (simple and compound) interest rates by various mechanisms.

## **Examine and Compare Various Savings Options**

- Compute (simple and compound) interest rates by various mechanisms.

## **Identify Consumer Rights and Responsibilities**

- Communicate with salespersons and merchants.
- Analyze simple contracts.
- Contest an incorrect bill.

## **Objectives for Personal Living and Finances Correlated with Virginia Mathematics Standards of Learning**

The table beginning on page eight lists the identified Objectives for Personal Living and Finances, the related Mathematics Standards of Learning (SOL), and examples (non-inclusive list). The examples are intended to clarify the content of the objectives and to help teachers begin developing topics for instruction. This table provides the correlation of the personal living and finances objectives with the appropriate Mathematics Standards of Learning. This correlation will help teachers strengthen SOL instruction without burdening the teachers with additional objectives. In many instances, personal living and finances objectives are applications of SOL content.

## Objectives for Personal Living and Finances Correlated with Virginia Mathematics Standards of Learning

These Objectives address topics specifically cited in §22.1-253.13:1.B of the *Code of Virginia*.

Objective	Related Mathematics SOL	Examples (List not inclusive)
<b>Compute and Understand Taxes</b>	6.8, 7.4, 8.3, 8.12	<ul style="list-style-type: none"> <li>Self-employed/independent contractor taxes</li> <li>Business taxes</li> </ul>
Investigate the implications of an inheritance	8.3	<ul style="list-style-type: none"> <li>State and federal taxes</li> <li>Right of survivorship</li> <li>Investment options</li> </ul>
Compute state and federal taxes.	7.4, 8.14, A.2	<ul style="list-style-type: none"> <li>Income tax</li> <li>Sales tax</li> </ul>
Verify local tax assessments.	8.3	<ul style="list-style-type: none"> <li>Sales tax</li> <li>Food tax</li> <li>Real estate tax</li> <li>Lodging tax</li> <li>Personal property tax</li> </ul>
<b>Prepare and Balance a Personal/Family Budget</b>	6.1, 6.7, 6.8, 6.18, 7.1, 7.4, 7.5, 7.16, 7.17, 7.18, 8.3, 8.12	<ul style="list-style-type: none"> <li>Estimation of expenses</li> <li>Construction of budget</li> <li>Financial management techniques for living within the budget</li> </ul>
Judge the quality of a bank's services to open a bank account	6.1, 7.1, 7.4, 7.5, 7.6, 8.3, 8.12, 8.13	<ul style="list-style-type: none"> <li>Interest rates of savings accounts/certificates of deposit</li> <li>Checking and other services</li> <li>Savings options</li> <li>Penalties</li> </ul>
Balance a check book.	6.6, 6.7, 7.4, 7.5, 8.3	<ul style="list-style-type: none"> <li>Reconciliation</li> <li>Overdraft</li> </ul>
Investigate the basics of personal insurance policies.	8.3	<ul style="list-style-type: none"> <li>Automobile</li> <li>Property</li> <li>Health</li> <li>Life</li> <li>Disability</li> </ul>
<b>Manage debt, including retail and credit card debt.</b>	6.1, 6.7, 6.8, 7.4, 7.6, 8.3, 8.17, A.1, A.2	<ul style="list-style-type: none"> <li>Record-keeping system for credit purchases</li> <li>Interest penalties</li> <li>Late payment penalties</li> <li>Debt payment plan</li> </ul>



<b>Objective</b>	<b>Related Mathematics SOL</b>	<b>Examples (List not inclusive)</b>
Complete a loan application.	<i>Note: Completing an application is outside the purview of the Virginia Mathematics Standards of Learning. However, the skill is addressed in at least one other Standard--English 10.4.</i>	<ul style="list-style-type: none"> <li>• Automobile</li> <li>• Personal</li> <li>• Equity</li> <li>• Home</li> </ul>
Compute [simple and compound] interest rates by various mechanisms.	6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.19, A.1, A.2	<ul style="list-style-type: none"> <li>• Simple interest calculation</li> <li>• Compound interest calculation</li> <li>• Manual vs. automated calculation alternatives</li> </ul>
<b>Examine and compare various savings options.</b>	6.1, 6.6, 6.7, 7.4, 7.18, 8.3, 8.12, 8.17, A.4	<ul style="list-style-type: none"> <li>• Stocks</li> <li>• Bonds</li> <li>• Real estate</li> <li>• Mutual funds</li> <li>• Retirement accounts</li> <li>• Passbook savings</li> <li>• Certificates of deposit</li> </ul>
Compute [simple and compound] interest rates by various mechanisms.	6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.17, A.1, A.2	<ul style="list-style-type: none"> <li>• Simple interest calculation</li> <li>• Compound interest calculation</li> <li>• Manual vs. automated calculation alternatives</li> </ul>
Identify consumer rights and Responsibilities.	6.8, 7.4, 8.3, A.4	<ul style="list-style-type: none"> <li>• Receipts</li> <li>• Guarantees</li> <li>• Warranties</li> <li>• Purchase agreements</li> <li>• Discounts</li> <li>• Rebates</li> <li>• Statistics</li> </ul>
Communicate with salespersons and merchants	6.8, 7.4, 8.3	<ul style="list-style-type: none"> <li>• Receipt verification</li> <li>• Mathematically-based sales techniques (e.g., discounts)</li> </ul>
Analyze simple contracts.	6.8, 7.4, 8.3	<ul style="list-style-type: none"> <li>• Loans</li> <li>• Employment contracts</li> <li>• Purchase agreements for products and services</li> </ul>
Contest an incorrect bill.	6.8, 7.4, 8.3	<ul style="list-style-type: none"> <li>• Receipt verification</li> <li>• Comparison to previous bills</li> </ul>

**Objectives for Personal Living and Finances  
Correlated with Virginia Mathematics Standards of Learning  
(With complete text of Standards of Learning)**

The table beginning on page 11 lists the Objectives for Personal Living and Finances and the complete text of related Mathematics Standards of Learning (SOL). This table provides the correlation of objectives with a particular SOL.

## Objectives for Personal Living and Finances Correlated with Virginia Mathematics Standards of Learning (With complete text of Standards of Learning)

These Objectives address topics specifically cited in §22.1-253.13:1.B of the *Code of Virginia*.

<b>Objectives for Personal Living and Finances</b>	<b>Related Mathematics Standards of Learning</b>
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account.</li> <li>• Examine and compare various savings options.</li> <li>• Manage debt, including retail and credit card debt.</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> <li>• Prepare and balance a personal/family budget.</li> </ul>	<p>6.1 The student will identify representations of a given percent and describe orally and in writing the equivalence relationships among fractions, decimals, and percents</p>
<ul style="list-style-type: none"> <li>• Examine and compare various savings options.</li> <li>• Balance a checkbook</li> </ul>	<p>6.6 The student will</p> <ol style="list-style-type: none"> <li>a) solve problems that involve addition, subtraction, multiplication and/or division with fractions and mixed numbers, with and without regrouping, that include like and unlike denominators of 12 or less and express their answers in simplest form; and</li> <li>b) find the quotient, given a dividend expressed as a decimal through thousandths and a divisor expressed as a decimal to thousandths with exactly one non-zero digit</li> </ol>
<ul style="list-style-type: none"> <li>• Examine and compare various savings options</li> <li>• Balance a check book</li> <li>• Manage debt, including retail and credit card debt.</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> <li>• Prepare and balance a personal/family budget.</li> </ul>	<p>6.7 The student will use estimation strategies to solve options multi-step practical problems involving whole numbers, decimals, and fractions (rational numbers).</p>

<b>Objectives for Personal Living and Finances</b>	<b>Related Mathematics Standards of Learning</b>
<ul style="list-style-type: none"> <li>• Identify consumer rights and</li> <li>• Communicate with salespersons and merchants</li> <li>• Manage debt, including retail and credit card debt</li> <li>• Compute and understand taxes</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> <li>• Analyze simple contracts.</li> <li>• Contest an incorrect bill.</li> <li>• Prepare and balance a personal/family budget</li> </ul>	6.8 The student will solve multi-step consumer-application problems involving fractions and decimals and present data and conclusions in paragraphs, tables or graphs. Planning a budget will be included
<ul style="list-style-type: none"> <li>• Prepare and balance a personal/family budget</li> </ul>	6.18 The student, given a problem situation, will collect, budget, analyze, display, and interpret data in a variety of graphical methods, including line, bar, and circle graphs; stem-and-leaf plots; and box-and-whisker plots. Circle graphs will be limited to halves, fourths, and eighths.
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account</li> <li>• Prepare and balance a personal/family budget</li> </ul>	7.1 The student will compare, order, and determine equivalent relationships between fractions, decimals, and percents, including use of scientific notation for numbers budget greater than 10.
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account</li> <li>• Examine and compare various savings options.</li> <li>• Balance a checkbook</li> <li>• Identify consumer rights and responsibilities</li> <li>• Communicate with salespersons and merchants.</li> <li>• Manage debt, including retail and credit card debt.</li> <li>• Compute and understand taxes</li> <li>• Compute state and federal taxes</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> <li>• Analyze simple contracts</li> <li>• Contest an incorrect bill</li> <li>• Prepare and balance a personal/family budget.</li> </ul>	<p>7.4 The student will open a bank account.</p> <ul style="list-style-type: none"> <li>a) solve practical problems using rational numbers (whole numbers, fractions, decimals) and percents; and</li> <li>b) solve consumer-application problems involving tips, discounts, sales tax and simple interest</li> </ul>
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account</li> <li>• Balance a check book.</li> <li>• Prepare a personal/family budget.</li> </ul>	7.5 The student will formulate rules for and solve practical problems involving basic operations (addition, subtraction, multiplication, and division) with integers.

<b>Objectives for Personal Living and Finances</b>	<b>Related Mathematics Standards of Learning</b>
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account.</li> <li>• Manage debt, including retail and credit card debt.</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> </ul>	7.6 The student will use proportions to solve practical problems, which may include scale drawings that contain rational numbers (whole numbers, fractions, and decimals) and percents.
<ul style="list-style-type: none"> <li>• Prepare and balance a personal/family budget.</li> </ul>	7.16 The student will create and solve problems involving the measures of central tendency (mean, median, mode) and
<ul style="list-style-type: none"> <li>• Prepare and balance a personal/family budget.</li> </ul>	7.17 The student will collect, analyze, display, and interpret data, using frequency distributions, line plots, stem-and- leaf plots, box-and-whisker plots, and scatter grams.
<ul style="list-style-type: none"> <li>• Examine and compare various savings options.</li> <li>• Prepare and balance a personal/family budget.</li> </ul>	7.18 The student will make inferences, conjectures, and predictions based on analysis of a set of data.
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account.</li> <li>• Examine and compare various savings options.</li> <li>• Balance a check book.</li> <li>• Investigate the implications of an inheritance.</li> <li>• Investigate the basics of personal insurance policies.</li> <li>• Identify consumer rights and responsibilities.</li> <li>• Examine consumer purchasing decisions.</li> <li>• Communicate with salespersons and merchants.</li> <li>• Manage debt, including retail and credit card debt.</li> <li>• Compute and understand taxes.</li> <li>• Verify local tax assessments.</li> <li>• Compute [simple and compound] interest rates by various mechanisms.</li> <li>• Analyze simple contracts.</li> <li>• Contest an incorrect bill.</li> <li>• Prepare and balance a personal/family budget.</li> </ul>	8.3 The student will solve practical problems involving rational numbers, percents, ratios, and proportions. Problems will be of varying complexities and will involve real-life data, such as finding a discount and discount prices and balancing a checkbook.
<ul style="list-style-type: none"> <li>• Judge the quality of a bank's services to open a bank account.</li> <li>• Examine and compare various savings options.</li> <li>• Prepare and balance a personal/family budget.</li> <li>• Compute and understand taxes.</li> </ul>	8.12 The student will make comparisons, predictions, and inferences, using information displayed in frequency distributions, box-and-whisker plots; scatter grams; line, bar, circle, and picture graphs; and histograms.

<b>Objectives for Personal Living and Finances</b>	<b>Related Mathematics Standards of Learning</b>
<ul style="list-style-type: none"> <li>Judge the quality of a bank's services to open a bank account.</li> </ul>	8.13 The student will use a matrix to organize and describe data.
<ul style="list-style-type: none"> <li>Compute state and federal taxes.</li> <li>Compute [simple and compound] interest rates by various mechanisms.</li> </ul>	8.14 The student will describe and represent relations using tables, graphs, rules; relate and compare tables, graphs, rules as different forms of representation for relationships.
<ul style="list-style-type: none"> <li>Examine and compare various savings options.</li> <li>Manage debt, including retail and credit card debt.</li> <li>Compute [simple and compound] interest rates by various mechanisms.</li> </ul>	8.17 The student will create and solve problems using proportions, formulas, and functions.
<ul style="list-style-type: none"> <li>Manage debt, including retail and credit card debt.</li> <li>Compute [simple and compound] interest rates by various mechanisms.</li> </ul>	A.1 The student will solve multi-step linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.
<ul style="list-style-type: none"> <li>Manage debt, including retail and credit card debt.</li> <li>Compute state and federal taxes.</li> <li>Compute [simple and compound] interest rates by various mechanisms.</li> </ul>	A.2 The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables. Students will choose an appropriate computational technique, such as mental mathematics, calculator, or paper and pencil.
<ul style="list-style-type: none"> <li>Examine and compare various savings options.</li> <li>Identify consumer rights and responsibilities.</li> </ul>	A.4 The student will use matrices to organize and manipulate data, including matrix addition, subtraction, and scalar multiplication. Data will arise from business, industrial, and consumer situations.

<b>Objectives for Personal Living and Finances</b>	<b>Related Mathematics Standards of Learning</b>
<i>Note: Completing an application is outside the purview of the Virginia Mathematics Standards of Learning. However, the skill is addressed in one other Standard, as follows:</i>	
Complete a loan application.	<p>Reading Analysis 11.4 The student will read and analyze a variety of informational materials.</p> <ul style="list-style-type: none"> <li>a) Use information from texts to clarify or refine understanding of academic concepts.</li> <li>b) Read and follow directions to complete an application for college admission, a scholarship, or for employment.</li> <li>c) Apply concepts and use vocabulary in informational and technical materials to complete a task.</li> <li>d) Generalize ideas from selections to make predictions about other texts.</li> <li>e) Analyze information from a text to draw conclusions.</li> </ul>

## **Personal Living and Finances Objectives in Virginia Career and technical education Programs (Grades 6-9)**

The personal living and finances objectives identified in this document are reinforced and taught in certain career and technical education courses in Grades 6 - 9. Those courses are identified by course code in the chart beginning on page 16. Each code listed indicates a career and technical education course in the program area listed at the top of the column. The objectives listed in the column on the left side of the chart are the personal living and finances objectives. The objectives address topics specifically cited in §22.1-253.13:1.B of the Code of Virginia. A complete list of career and technical education courses, their course descriptions, and the competencies to be achieved and measured are available from the Virginia Department of Education.

The information in the following chart is provided to assist mathematics teachers and career and technical education teachers who wish to work together to ensure that students fulfill the personal living and finances objectives. The chart also indicates where these objectives are already available to those students who enroll in certain career and technical education course of study.



## Personal Living and Finances Objectives in Virginia Career and technical education Programs (Grades 6-9)

The personal living and finances objectives identified in this document are reinforced and taught in the career and technical education courses indicated below. In the chart, objectives address topics specifically cited in §22.1-253.13:1.B of the Code of Virginia. The information in this chart is provided to assist mathematics teachers and career and technical education teachers who wish to work together to ensure that students fulfill the personal living and finances objectives.

VOCATIONAL PROGRAMS						
PERSONAL LIVING AND FINANCES OBJECTIVES with MATHEMATICS STANDARDS OF LEARNING	Agriculture	Business	Marketing	Trade and Industrial	Work and Family Studies	Career Connections
Course Codes						
Compute and Understand Taxes (6.8, 7.5, 8.4, 8.13)		6115	8115			
Investigate the implications of an inheritance. (8.4)		6120/21				
Compute state and federal taxes. (7.5, 8.18, A.2)		6115	8115		8211/12 8214/19	
Verify local tax assessments (8.4)					8214/19	
Prepare and balance a personal/family budget. (6.1, 6.7, 6.8, 6.18, 7.1, 7.5, 7.6, 7.19, 7.20, 7.21, 8.4, 8.13)	8072	6115 6120/21	8115		8211/12	9075/76 9082/83
Judge the quality of a bank's services to open a bank account. (6.1, 7.1, 7.5, 7.6, 7.7, 8.4, 8.13, 8.14)		6115 6120/21	8115		8211/12	
Balance a check book. (6.6, 6.7, 7.5, 7.6, 8.4)		6115 6120/21	8115			
Investigate the basics of personal insurance policies. (8.4)		6115 6120/21	8115		8211/12	9077/84

VOCATIONAL PROGRAMS						
<b>PERSONAL LIVING AND FINANCE OBJECTIVES with MATHEMATICS STANDARD OF LEARNING</b>	<b>Agriculture</b>	<b>Business</b>	<b>Marketing</b>	<b>Trade and Industrial</b>	<b>Work and Family Studies</b>	<b>Career Connections</b>
Manage debt, including retail and credit card debt. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.19, A.1, A.2)		6115 6120/21			8211/12 8214/19	
Complete a loan application. ( <i>Note: Completing an application is outside the purview of the Virginia Mathematics Standards of Learning. However, the skill is addressed in at least one other Standard — English 10.4 and English 11.4).</i> )		6115	8115		8214/19	
Compute [simple and compound] interest rates by various mechanisms. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.19, A.1, A.2)		6115	8115			
Examine and compare various savings options. (6.1, 6.6, 6.7, 7.5, 7.21, 8.4, 8.13, 8.19, A.4)		6115	8115		8211/12 8214/19	
Compute [simple and compound] interest rates by various mechanisms. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.19, A.1, A.2)		6115	8115			
Identify consumer rights and responsibilities. (6.8, 7.5, 8.4, A.4)		6115	8115		8214/19	
Communicate with salespersons and merchants. (6.8, 7.5, 8.4)						
Analyze simple contracts. (6.8, 7.5, 8.4)		6115	8115		8214	

<b>VOCATIONAL PROGRAMS</b>						
<b>PERSONAL LIVING AND FINANCE OBJECTIVES with MATHEMATICS STANDARD OF LEARNING</b>	<b>Agriculture</b>	<b>Business</b>	<b>Marketing</b>	<b>Trade and Industrial</b>	<b>Work and Family Studies</b>	<b>Career Connections</b>
Contest an incorrect bill. (6.8, 7.5, 8.4)		6115	8115			

## **Personal Living and Finances Objectives in Virginia Career and Technical Education Programs (Grades 10-12)**

The personal living and finances objectives identified in this document also are reinforced at a higher level of application in certain career and technical education courses in Grades 10-12. Those courses are identified by course code in the chart beginning on 21. Each code listed indicates a career and technical education course in the program area listed at the top of the column. The objectives listed in the column on the left side of the chart are the personal living and finances objectives. The objectives address topics specifically cited in §22.1-253.13:1.B of the Code of Virginia. A complete list of career and technical education courses, their course descriptions, and the competencies to be achieved and measured are available from the Virginia Department of Education.

The information in the following chart is provided to assist mathematics teachers and vocational-tech teachers who wish to work together to ensure that students fulfill the personal living and finances objectives. The chart also indicates where those objectives are already available to those students who enroll in certain career and technical education courses of study.

## Personal Living and Finances Objectives in Virginia Career and technical education Programs (Grades 10-12)

The personal living and finances objectives identified in this document are reinforced at a higher level of application in the career and technical education courses indicated below. In the chart, objectives address topics specifically cited in §22.1-253.13:1.B of the Code of Virginia. The information in this chart is provided to assist mathematics teachers and career and technical education teachers who wish to work together to ensure that students fulfill the personal living and finances objectives.

VOCATIONAL PROGRAMS							
PERSONAL LIVING AND FINANCES OBJECTIVES with MATHEMATICS STANDARDS OF LEARNING	Agriculture	Business	Health Occupations	Marketing	Trade and Industrial	Work and Family Studies	Career Connections
Course Codes							
Compute and Understand Taxes (6.8, 7.5, 8.4, 8.13)	8014 8022	6115 6120/21 6320/21		8115 8120 8130		8293/94 8214 8219	
Investigate the implications of an inheritance. (8.4)	8014	6131 6120/21					
Compute state and federal taxes. (7.5, 8.18, A.2)	8014 8022 8042	6115 6320/21		8115 8120 8130	8901/02	8214/19	
Verify local tax assessments. (8.4)	8018 8042	6120				8214/19	
Prepare and balance a personal/family budget. (6.1, 6.7, 6.8, 6.18, 7.1, 7.5, 7.6, 7.19, 7.20, 7.21, 8.4, 8.13)	8014 8022 8042 8072	6115 6120	8332	8115	8901/02		
Judge the quality of a bank's services to open a bank account. (6.1, 7.1, 7.5, 7.6, 7.7, 8.4, 8.13, 8.14)	8024	6115 6120 6320		8115	8901/02		
Balance a check book. (6.6, 6.7, 7.5, 7.6, 8.4)	8014 8022	6115 6120 6320	8332	8115			

VOCATIONAL PROGRAMS							
<b>PERSONAL LIVING AND FINANCES OBJECTIVES with MATHEMATICS STANDARDS OF LEARNING</b>	<b>Agriculture</b>	<b>Business</b>	<b>Health Occupations</b>	<b>Marketing</b>	<b>Trade and Industrial</b>	<b>Work and Family Studies</b>	<b>Career Connections</b>
Investigate the basics of personal insurance policies. (8.4)	8014 8024 8042	6115 6120 6131	8328/29 8345/46	8115	8901/02		9077/84
Manage debt, including retail and credit card debt. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.19, A.1, A.2)	8014	6120 6115		8130		8214/19	
Complete a loan application. ( <i>Note: Completing an application is outside the purview of the Virginia Mathematics Standards of Learning. However, the skill is addressed in at least one other Standard —English Reading Analysis 11.4.</i> )	8014 8026 8042	6115 6120		8115		8214/19	
Compute [simple and compound] interest rates by various mechanisms. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.19, A.1, A.2)	8014	6120 6115 6320/21		8120		8293/94 8214 8219	
Examine and compare various savings options. (6.1, 6.6, 6.7, 7.5, 7.21, 8.4, 8.13, 8.19, A.4)	8024	6115 6120		8115	8901/02	8211/12 8214/19	

<b>VOCATIONAL PROGRAMS</b>							
<b>PERSONAL LIVING AND FINANCES OBJECTIVES with MATHEMATICS STANDARDS OF LEARNING</b>	<b>Agriculture</b>	<b>Business</b>	<b>Health Occupations</b>	<b>Marketing</b>	<b>Trade and Industrial</b>	<b>Work and Family Studies</b>	<b>Career Connections</b>
Compute [simple and compound] interest rates by various mechanisms. (6.1, 6.7, 6.8, 7.5, 7.7, 8.4, 8.18, 8.19, A.1, A.2)	8014	6120 6115 6320/21		8120			
Identify consumer rights and responsibilities. (6.8, 7.5, 8.4, A.4)	8018 8022	6115 6120 6131	8331 8332 8360/62 8333/34	8115 8130		8214/19	
Communicate with sales-persons and merchants. (6.8, 7.5, 8.4)		6621		8130	8901/02		
Analyze simple contracts. (6.8, 7.5, 8.4)	8014 8022 8042	6115 6120 6130 6736	8328/29	8115 8130		8214/19	
Contest an incorrect bill. (6.8, 7.5, 8.4)		6115		8115			

## APPENDIX A

### Text of the *Code of Virginia* §22.1-253.13:1.B

Below is the text from the Code of Virginia §22.1-253.13:1.B relating to the development of personal living and finances objectives:

*By July 1, 1999, the Board shall develop and approve objectives for mathematics, at the middle and high school levels, for personal living and finances, which shall focus on money management skills for individuals and families. The personal living and finances objectives shall require instruction in those skills necessary to handle personal business and finances and shall include, but need not be limited to, the following: opening a bank account and how to judge the quality of a bank's services; balancing a check book; completing a loan application; the implications of an inheritance; the basics of personal insurance policies; consumer rights and responsibilities; dealing with salesmen and merchants; debt management, including retail and credit card debt; state and federal tax computation; local tax assessments; computation of interest rates by various mechanisms; understanding simple contracts; and how to contest an incorrect bill. These personal living and finances objectives shall not be required to be included in the Board's Standards of Learning, and shall be developed in a manner to ensure that instruction in the Standards of Learning shall not be de-emphasized. The Board shall not be required to evaluate student achievement concerning such objectives in the Standards of Learning Assessment Tests required by §22.1-253.13:3.*



## **APPENDIX B**

### **Resources for Personal Living and Finances**

#### **Virginia (State Level) - Current**

Standards of Learning for Virginia Public Schools, 2001

Mathematics Standards of Learning (SOL)

Consumer References in English and History/Social Science SOL

##### **Agricultural Education**

Agricultural Business Fundamentals (Course code—8022)

Agricultural Business Operations (Course code—8024)

Agricultural Business Management (Course code—8026)

##### **Business**

Principles of Business and Marketing (Course codes—6115, Business; 8115, Marketing)

Finance (Course code—6120)

Business Law (Course code—6131)

##### **Marketing**

Principles of Business and Marketing (Course codes—8115, Marketing; 6115, Business)

Fundamentals of Marketing (Course code—8110)

Marketing (Course codes—8120, 8121)

Advanced Marketing (Course code—8130, 8131)

##### **Trade and Industrial Education**

Industrial Cooperative Training (ICT) (Course codes—8901, 8902, 8903, 8904)

##### **Work and Family Studies**

General Employability Skills

Resource Management (Course codes—8214, 8219)

Graduation, Reality, and Dual-Role Skills Program (GRADS) (Course codes—8211, 8212)

##### **Career Connections**

Education for Employment (EFE) (Course codes—9075, 9076, 9077, 9078, 9079, 9080, 9082, 9083, 9084, 9085, 9086, 9087)

Career Pathways (Course codes—9070, 9071, 9072)

#### **Virginia (State Level) - Former**

Standards of Learning Objectives, 1987/88

Consumer Mathematics

Applied Mathematics

##### **Business**

Business Mathematics (1980)

Business Economics (1980)

Business Economics (1985)

#### **Virginia (Local Level)**

Rockingham County Public Schools Consumer Math

#### **Other States**

Colorado - Consumer Math

Florida - Applied Consumer Math

Florida - Personal and Family Finance

Florida - Practical Financial Skills

Michigan - Consumer Education  
Ohio - Model Competency-Based Mathematics Program  
Texas - Consumer and Family Economics  
Washington (Mukilteo School District No. 6) - Consumer Math 26  
Washington (Renton School District No. 403) - Consumer Math  
Washington (Mukilteo School District No. 6) - Occupational Math

### **National/Regional Organizations**

Economics America  
    Voluntary National Content Standards in Economics  
    Handbook: Voluntary National Content Standards  
    Framework for Teaching Basic Economic Concepts  
    Personal Finance Economics, 9-12: Wallet Wisdom  
National Council on Economic Education  
V-TECS: Home and Career Skills  
National Council of Teachers of Mathematics: Curriculum & Evaluation Standards  
Council of Chief State School Officers: State Curriculum Frameworks in Mathematics and Science  
National Assessment of Educational Progress: Mathematics Framework, 1996  
National Business Education Standards

### **Textbooks**

Applied Business Mathematics (South-Western, 1997)  
Applied Mathematics (Work Keys, ACT, 1994)  
The Confident Consumer (Goodheart-Willcox, 1995)  
Consumer Economics (South-Western, 1998)  
Decisions: Making Personal Economic Choices (EMC, 1992)  
Consumer Education and Economics (Glencoe, 1989)  
Dollars and Sense (South-Western, 1989)  
Managing Your Personal Finances (South-Western, 1997)  
Mathematics of Money with Algebra (South-Western, 1995)  
Money Skills (NationsBank, 1994)

### **Taxonomies**

The Basic/Essential Skills Taxonomy, Lester M. Snyder (Arizona Department of Education, 1990)

### **WWW Sites**

Consumer Education (<http://www.powersource.com/mmbm/consumer/default.htm>)  
Consumer Math ([http://www.cybersyte.com/scp/SESD%20Themeboxes/Consumer%20Math%20\(10-12\)/consumer\\_math.htm](http://www.cybersyte.com/scp/SESD%20Themeboxes/Consumer%20Math%20(10-12)/consumer_math.htm))  
Developing Educational Standards—Math (<http://putwest.boces.org/StSu/Math.html>)  
EcEdWeb (<http://ecedweb.unomaha.edu/home2.htm>)  
Economics America (<http://www.economicsAmerica.org>)  
Economics International: Personal Finance Links (<http://www.economicsintl.org>)  
National Council on Economic Education (<http://www.nationalcouncil.org>)  
National Institute for Consumer Education: Advertising and Young Consumers (<http://www.emich.edu/public/coe/nice/advertrl.html>)  
National Institute for Consumer Education: Facts about NICE (<http://www.emich.edu/public/coe/nice/mission.html>)  
Pathways to School Improvement—Topics—Math (<http://www.ncrel.org/sdrs>)  
Personal Finance Economics (<http://www.economicsAmerica.org/cat5.html>)  
Personal Finance Resources (<http://www.emich.edu/public/coe/nice/pfinance.html>)  
Selected Internet Resources for Teachers of Economics in Secondary Schools (<http://www.ecom.unimelb.edu.au/ecowww/school.html>)

United States Consumer Information Center: Online Booklets on Money Management  
(<http://www.pueblo.gsa.gov/money.htm>)

Utah Link: Economics/Business Education and Personal Finance  
(<http://www.uen.org/utahlink/links/econ-business.html>)

What is a Household Budget? (<http://dacom.hypermart.net/whatis.html>)

*For further information about these and other relevant resources, contact the Virginia Vocational Curriculum and Resource Center at 804/261-5075 (fax 804/261-5079; [mgrattan@vvcrc.tec.va.us](mailto:mgrattan@vvcrc.tec.va.us)).*